

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A broadcasting system comprising:

a broadcasting station for broadcasting digital contents and attribute information indicating an attribute thereof and an electronic program guide (EPG); and

a plurality of reception apparatuses having:

reception means for receiving said digital contents and said attribute information broadcast from the broadcasting station,

output means for outputting the received digital contents, and

selection means for allowing a user to select the digital contents via a filtering process by comparing selection information indicating user preferences with attribute information assigned to the digital contents,

said selection information is expressed with an n-dimensional vector S comprising user preference items as elements,

wherein each element identifies a preference intensity,

wherein an element of vector S identifies a positive value as a preference intensity when the user has demonstrated a positive preference for the element and identifies a negative value as a preference intensity when the user has demonstrated a negative preference for the element, and

wherein said plurality of reception apparatuses include a selection means for: (1) performing a calculation between a vector A related to the attribute information and the vector S; and (2) determining whether to select the digital content based on the result of the calculation,

wherein Vector S is generated by using Vector A for a program which is reproduced for a specified period of time or longer, and
wherein Vector S is generated by changing a weighting factor for a reserved program and a realtime reproduced program.

2. – 9. (Canceled)

10. (Currently Amended) A reception apparatus comprising:

reception means for receiving digital contents and attribute information transmitted from a content provider;

output means for outputting the received digital content; and

selection means for allowing a user to select the digital contents via a filtering process by comparing selection information indicating user preferences with attribute information related to the digital content,

said selection information is expressed with an n-dimensional vector S comprising user preference items as elements,

wherein each element identifies a preference intensity,

wherein an element of vector S identifies a positive value as a preference intensity when the user has demonstrated a positive preference for the element and identifies a negative

value as a preference intensity when the user has demonstrated a negative preference for the element, and

wherein said selection means performs a calculation between a vector A related to the attribute information and the vector S, and determines whether to select the digital content based on the result of the calculation,

wherein Vector S is generated by using Vector A for a program which is reproduced for a specified period of time or longer, and

wherein Vector S is generated by changing a weighting factor for a reserved program and a realtime reproduced program.

11. (Previously Presented) The reception apparatus according to claim 10, wherein said selection means finds a selection value P based on the following equation and selects the digital content based on a size of the selection value P as follows:

$$A = (a_1, a_2, a_3, \dots, a_n)$$

$$S = (s_1, s_2, s_3, \dots, s_n)$$

$$P = \frac{A \cdot S}{|A| \cdot |S|}$$

where

$$A \cdot S = \sum_{k=1}^n a_k s_k$$

$$|A| = \sqrt{\sum_{k=1}^n a_k^2}$$

$$|S| = \sqrt{\sum_{k=1}^n S_k^2}$$

in which neither A nor S is a zero vector.

12. (Previously Presented) The reception apparatus according to claim 10, wherein said selection information's vector S is found from a vector A of attribute information attached to a plurality of digital contents selected by the user.

13. (Previously Presented) The reception apparatus according to claim 12, wherein said selection information's vector S is found according to the following equation:

$$S = \frac{1}{M} \sum_{k=1}^M A_k$$

where M is assumed to be a number of digital contents selected by the user and an attribute vector for the K-th digital content selected by the user is assumed to be: $A_k = (a_{1k}, a_{2k}, a_{3k}, \dots, a_{nk})$.

14. (Previously Presented) The reception apparatus according to claim 12, wherein said selection information's vector S is found according to the following equation:

$$S = \frac{1}{M} \sum_{k=L-M+1}^L A_k$$

where M is assumed to be a number of windows for finding a vector S, L is assumed to be a start point for selecting the plurality of digital contents for finding the vector S,

and an attribute vector for the K-th digital content selected by the user is assumed to be: $A_k = (a_{1k}, a_{2k}, a_{3k}, \dots, a_{nk})$.

15. (Previously Presented) The reception apparatus according to claim 12, wherein said selection information's vector S is found by averaging vectors A for attribute information attached to the plurality of digital contents reproduced by the user for a specified time.

16. (Previously Presented) The reception apparatus according to claim 12, wherein said selection information's vector S is found by averaging vectors A for attribute information attached to the plurality of digital contents reserved by the user.

17. (Previously Presented) The reception apparatus according to claim 12, wherein said selection information's vector S is found by averaging vectors A for attribute information attached to the plurality of digital contents reproduced by the user for a specified time, averaging vectors A for attribute information attached to the plurality of digital contents reserved by the user, assigning a weight to each average, and combining the weights.

18. (Previously Presented) The reception apparatus according to claim 10, wherein said selection means selects the digital content based on a vector S of the selection information corresponding to a plurality of users.

19. (Currently Amended) A reception method comprising:

receiving digital contents and attribute information transmitted from a content provider;

outputting the received digital content;

allowing a user to select the digital contents via a filtering process by comparing selection information indicating user preferences with attribute information related to the digital content;

expressing the selection information with an n-dimensional vector S comprising user preference items as elements,

identifying a preference intensity for each element

wherein an element of vector S identifies a positive value as a preference intensity when the user has demonstrated a positive preference for the element and identifies a negative value as a preference intensity when the user has demonstrated a negative preference for the element, and

performing a calculation between a vector A related to the attribute information and the vector S; and

determining, based on calculation, whether to select the digital content,

wherein Vector S is generated by using Vector A for a program which is reproduced for a specified period of time or longer, and

wherein Vector S is generated by changing a weighting factor for a reserved program and a realtime reproduced program.